L Number 1 2	Hits : 3903 1618	Hits Search Text 3903 ("514/183,430,456").CCLS 1618 ("549/23,362,396,406,407").CCLS	
	427	(("514/183,430,456").CCLS) and (("549/23,362,396,406,407").CCLS)	7").CCLS)   USPAT
	37	37 ((("514/183,430,456").CCLS) and (("549/23,362,396,406,407").CCLS)) and	
		chromene	
5	21	(((("514/183,430,456").CCLS) and (("549/23,362,396,406,407").CCLS)) and	07").CCLS)) and
		chromene) and oxo	

Search History

(R) - (+) -2 - [[[3 - (Morpholinomethyl) - 2H - chromen - 8 - yl] oxy] methyl] morpholine128:265746 DN Methanesulfonate: A New Selective Rat 5-HydroxytryptaminelB Receptor TI

Berg, Stefan; Larsson, Lars-Gunnar; Renyi, Lucy; Ross, Svante B.; Thorberg, Seth-Olof; Thorell-Svantesson, Gun ΑU

Departments of Medicinal Chemistry Behavioral and Biochemical Pharmacology. and Molecular Pharmacology, Preclinical RD, Soedertaelje, S-151 85, Swed. CS

Journal of Medicinal Chemistry (1998), 41(11), 1934-1942 SO CODEN: JMCMAR; ISSN: 0022-2623

American Chemical Society PB

Journal DΤ

English LA

GI

In the search for new 5-hydroxytryptamine (5-HT) receptor antagonists it was found that the compd. (R)-(+)-2-[[[3-(morpholinomethyl)-2H-chromen-8yl]oxy]methyl]morpholine methanesulfonate [(R)-I.cntdot.MeSO3H.cntdot.H2O], is a selective rat 5-hydroxytryptaminelB (r5-HT1B) receptor antagonist. The binding profile showed a 6-fold preference for r5-HT1B (Ki = 47 .+- .5 nM; n = 3) vs bovine 5-HT1B (Ki = .72 .+- .5 nM; n = .73 .-- .74 .-- .75 .--630 nM; n = 1) receptors. (R)-I.cntdot.MeSO3H.cntdot.H2O had very low affinity for other monoaminergic receptors examd. The r5-HT1B receptor antagonism was demonstrated by the potentiation of the K+-stimulated release of [3H]-5-HT from superfused rat brain slices in vitro, an effect that was antagonized by addn. of 5-HT to the superfusion fluid. (R)-I.cntdot.MeSO3H.cntdot.H2O at 20 mg/kg s.c. enhanced the 5-HT turnover in four rat brain regions (hypothalamus, hippocampus, striatum, and frontal cortex) with about 40% measured as the 5-HTP accumulation after decarboxylase inhibition with 3-hydroxybenzylhydrazine. At 3 mg/kg s.c.

(R)-I.cntdot.MeSO3H.cntdot.H2O produced a significant increase in the no. of wet-dog shakes in rats, a 5-HT2A/5-HT2C response that was abolished by depletion of 5-HT after pretreatment with the tryptophan hydroxylase inhibitor p-chlorophenylalanine. These observations show that (R)-I.cntdot.MeSO3H.cntdot.H2O, by inhibiting terminal r5-HT1B autoreceptors, increases the 5-HT turnover and the synaptic concn. of z z tol

THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD 5-HT. ALL CITATIONS AVAILABLE IN THE RE FORMAT RE.CNT 32

AB The title compds. I [R1, R2 and R3 represent each lower alkoxy, etc., or R1 and R2 may be combined together to represent O(CH2)mO (wherein m is an integer of 1 - 3), etc.; R4 represents hydrogen, lower alkyl or aralkyl; R5 represents hydroxy, amino or lower alkoxy; R6 represents hydrogen or lower alkyl, or CR5R6 = carbonyl; dotted line indicates single or double bond; when dotted line indicates double bond, there is no R5; A represents an ethylene group which may be substituted by lower alkyl; and B represents optionally branched C1-C10 alkylene), useful for treating diseases such as anxiety, manic-depressive state and schizophrenia, sex disorder, eating disorder, sleep disorder, and drug dependence, are prepd. Chromene deriv. II hemifumarate (prepn. given) in vitro showed potent affinity for 5-HT 1A receptor with Ki of 0.159 nM.

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AN
     1995:568450 CAPLUS
DN
     122:314453
ΤI
     Preparation and formulation of chroman and chromene derivatives
     with selective affinity for 5HT 1A receptors
IN
     Yasunaga, Tomoyuki; Kimura, Takenori; Naito, Ryo; Kontani, Toru;
     Yamaguchi, Tokio; Wanibuchi, Fumikazu
     Yamanouchi Pharmaceutical Co., Ltd., Japan
PA
     PCT Int. Appl., 83 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     Japanese
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                             APPLICATION NO.
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                                             -----
                                        WO 1994-JP923
PΙ
     WO 9429293
                       Al 19941222
                                                               19940608
         W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, GE, HU, JP, KE, KG, KR, KZ,
             LK, LV, MD, MG, MN, MW, NO, NZ, PL, PT, RO, RU, SD, SI, SK, TJ,
         TT, UA, US, UZ, VN
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
                                             JP 1993-138580
                                                              19930610
     AU 9469361
                        Al
                              19950103
                                             AU 1994-69361
                                                               19940608
                                             JP 1993-138580
                                                               19930610
                                             WO 1994-JP923
                                                                19940608
os
     MARPAT 122:314453
GI
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<1/31/2004>

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     1
                 "Ask CAS" for self-help around the clock
NEWS
     2
NEWS 3
         SEP 09
                CA/CAplus records now contain indexing from 1907 to the
                 present
NEWS
         DEC 08
                INPADOC: Legal Status data reloaded
         SEP 29 DISSABS now available on STN
NEWS
NEWS 6
        OCT 10 PCTFULL: Two new display fields added
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced
NEWS 8
        OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 9 NOV 24 MSDS-CCOHS file reloaded
NEWS 10 DEC 08 CABA reloaded with left truncation
        DEC 08 IMS file names changed
NEWS 11
NEWS 12 DEC 09
                Experimental property data collected by CAS now available
                 in REGISTRY
        DEC 09
NEWS 13
                STN Entry Date available for display in REGISTRY and CA/CAplus
        DEC 17
NEWS 14
                DGENE: Two new display fields added
NEWS 15
        DEC 18
                BIOTECHNO no longer updated
NEWS 16 DEC 19
                CROPU no longer updated; subscriber discount no longer
                 available
        DEC 22
                Additional INPI reactions and pre-1907 documents added to CAS
NEWS 17
                 databases
        DEC 22
NEWS 18
                IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS 19
         DEC 22
                ABI-INFORM now available on STN
NEWS 20
         JAN 27
                Source of Registration (SR) information in REGISTRY updated
                 and searchable
NEWS 21
         JAN 27
                A new search aid, the Company Name Thesaurus, available in
                 CA/CAplus
NEWS EXPRESS DECEMBER 28 CURRENT WINDOWS VERSION IS V7.00, CURRENT
             MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
             AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
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             Welcome Banner and News Items
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             Direct Dial and Telecommunication Network Access to STN
NEWS WWW
             CAS World Wide Web Site (general information)
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10051776.8 Page 2

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0.21 0.21

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

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L1 HAS NO ANSWERS

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Structure attributes must be viewed using STN Express query preparation.

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FULL SEARCH INITIATED 12:30:18 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 32 TO ITERATE

100.0% PROCESSED

32 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

L2

0 SEA SSS FUL L1

=> file marpat

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY SESSION 155.42 155.63

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FILE CONTENT: 1988-PRESENT (VOL 104 ISS 15-VOL 140 ISS04) (20040123ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6667161 23 DEC 2003 DE 10317295 24 DEC 2003 EP 1371658 17 DEC 2003

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<1/31/2004>

JP 2003346928 05 DEC 2003 WO 2004000750 31 DEC 2003

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

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FULL SEARCH INITIATED 12:30:34 FILE 'MARPAT' FULL SCREEN SEARCH COMPLETED - 2974 TO ITERATE

100.0% PROCESSED 2974 ITERATIONS 5 ANSWERS

SEARCH TIME: 00.00.09

5 SEA SSS FUL L1

=> file caold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL SESSION

265.05

FULL ESTIMATED COST

ENTRY 109.42

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FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

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=> file caplus COST IN U.S. DOLLARS

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FULL ESTIMATED COST

ENTRY SESSION 0.42 265.47

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FILE COVERS 1907 - 31 Jan 2004 VOL 140 ISS 6 FILE LAST UPDATED: 30 Jan 2004 (20040130/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L5
               5 L3
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     ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
L5
AN
     2002:539472 CAPLUS
DN
     137:93772
ΤI
     Preparation of piperazinylchromenones as 5-HT1B 5-HT1D
     agonists/antagonists useful as drugs.
IN
     Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler,
     Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
     Astrazeneca Ab, Swed.
PA
     PCT Int. Appl., 150 pp.
SO
     CODEN: PIXXD2
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     Patent
     English
LA
FAN.CNT 1
                         KIND DATE
     PATENT NO.
                                                   APPLICATION NO. DATE
                        ____
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                                                   WO 2002-SE69
PI
     WO 2002055013
                           A2
                                 20020718
                                                                       20020115
     WO 2002055013
                          А3
                                 20021114
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               CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
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          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
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                                                   US 2001-262109PP 20010116
                                                                   A 20011101
                                                   SE 2001-3647
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                                                   US 2001-262109PP 20010116
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                                                                     W 20020115
     NO 2003003204
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                                 20030902
                                                   NO 2003-3204
                                                                       20030715
                                                   US 2001-262109PP 20010116
                                                   SE 2001-3647
                                                                    A 20011101
                                                   WO 2002-SE69
                                                                    W 20020115
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OS MARPAT 137:93772 GI

$$\begin{array}{c|c} & & & \\ & & & \\ R1 & & & \\ & & & \\ & & & \\ R2 & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\$$

AB Title compds. [I; R1 = H, thiomethoxy, NHA, NA2, NHCOA, halo, OH, OA, cyano, aryl, (substituted) alkyl, cycloalkyl, etc.; A = (substituted) alkyl, cycloalkyl, alkenyl, alkynyl; R2 = (substituted) piperazinyl, homopiperazinyl, aminoalkylamino, aminoheterocyclyl, heterocyclylamino; R6 = H, Me; Y = CONH, CONA, CSNH, CH2CO, CH2NA, piperazinylcarbonyl, 5-membered heterocyclylene, etc.; R7 = (substituted) mono- or bicyclic aryl, heterocyclyl], were prepd. Thus, 8-(4-methyl-1-piperazin-1-yl)-4oxo-4H-chromene-2-carboxylic acid hydrochloride (prepn. given) in DMF/Et3N was treated sequentially with 1-hydroxybenzotriazole, O-(1H-benzotriazol-1yl)-N,N,N',N'-pentamethyleneuronium tetrafluoroborate, 4-dimethylaminopyridine, and 4-(4-morpholinyl)aniline (prepn. given) to give 8-(4-methyl-1-piperazinyl)-N-[4-(4-morpholinyl)phenyl]-4-oxo-4Hchromene-2-carboxamide. Several I showed 5-HT1B antagonist activity in the range 0.006-5.5 mg/kg in a screen for reversal of hypothermia in guinea pigs.

L5 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:539471 CAPLUS

DN 137:109205

TI Preparation of 4-oxo-4H-chromene-2-carboxamides and related compounds as antagonists or agonists of serotonin 5HT1B and 5HT1D receptors

IN Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; McCauley, John; Pierson, Edward; Sohn, Daniel

PA Astrazeneca Ab, Swed.

SO PCT Int. Appl., 147 pp. CODEN: PIXXD2

DT Patent

LA English

FAN CNT 1

PAN.CNI I																						
	PATENT NO.				KIND DA		DATE	DATE			APPLICATION NO.						DATE					
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PI	I WO 2002055012			A2		20020718			WO 2002-SE68 20020115													
	WO	2002	0550	12	A	3	2002	1114														
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		•	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,				
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,				
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	NZ,	OM,	PH,				
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BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                            US 2001-262107PP 20010116
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                             20031022
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                                            EP 2002-729622
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                                                           A 20011101
                                            WO 2002-SE68
                                                            W 20020115
                             20030116
     US 2003013708
                       A1
                                            US 2002-51776
                                                              20020116
                                            US 2001-262107PP 20010116
                                            SE 2001-3650
                                                           A 20011101 ._
                                            WO 2002-SE68
                                                            W 20020115
     NO 2003003203
                             20030902
                                            NO 2003-3203
                                                              20030715
                                            US 2001-262107PP 20010116
                                            SE 2001-3650
                                                           A 20011101
                                            WO 2002-SE68
                                                           W 20020115
     MARPAT 137:109205
OS
GI
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 $R^{5}$   $R^{6}$   $Y-R^{7}$   $CO_{2H}$   $CO_{2H}$ 

CH3

AB Title compds. I and their pharmaceutically acceptable salts [R1 = H, alkyl, cycloalkyl, thiomethoxy, etc.; R2 = NR3R3; R3 independently = H, (un)substituted alkylamine e.g., alkyl, alkenyl, alkynyl amino-heterocycle, etc; R3-R3 = (un)substituted cycloalkylamine or amino-heterocycle e.g., alkyl, alkenyl, alkynyl, etc; R5 = H, O, S, etc.; R6 = H, Me; R7 = (un)substituted mono-. or bicylo- arom., (un)substituted heterocycle; X = O, N, NH, S; Y = CONH, NHCO, CSNH, etc.] were prepd with the proviso that multiple bonds are sepd. from each other by at least one

III

single bond. For example, condensation of 4-oxo-4H-chromene-2-carboxylic acid II e.g., prepd. from diethylacetylenedicarboxylate and 2-bromo-4-fluorophenol in 5 steps, and 4-morpholin-4-yl-phenylamine provided preferred 4-oxo-4H-chromene-2-carboxamide III. The utility of the compds. of the present invention were tested using a guinea pig hypothermia test, ED50 values for compds. I range from 0.006-5.5 mg/kg. Compds. I are disclosed to be antagonists or agonists of serotonin 5HT1B and 5HT1D receptors (no data provided). Also I are claimed for use in the treatment of gastrointestinal disorders, cardiovascular regulation, motor disorders, etc..

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L5
     ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
     2000:209909 CAPLUS
AN
DN
     132:241974
TΙ
     Method for solubilizing pyridonecarboxylic acid, solubilizer therefor,
     aqueous solution preparations containing pyridonecarboxylic acid and
     process for producing the same
IN
     Sawa, Shirou
PA
     Senju Pharmaceutical Co., Ltd., Japan
SO
     PCT Int. Appl., 21 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     Japanese
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
                      ____
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PΙ
     WO 2000016774
                      A1
                            20000330
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                                                            19990913
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         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
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                                                          19990913
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             IE, SI, LT, LV, FI, RO
                                           JP 1998-265523 A 19980918
                                           WO 1999-JP4992 W 19990913
     US 6306856
                       B1
                            20011023
                                           US 2000-554660
                                                            20000518
                                           JP 1998-265523 A 19980918
                                           WO 1999-JP4992 W 19990913
OS
    MARPAT 132:241974
AΒ
     A method for solubilizing pyridonecarboxylic acid or a pharmacol.
     acceptable salt thereof is characterized by blending glycyrrhizinic acid
     or its salt with pyridonecarboxylic acid or a pharmacol. acceptable salt
     thereof. Disclosed is an aq. soln. contg. the thus solubilized
     pyridonecarboxylic acid or a salts thereof. By using the above
     solubilization method, the soly. of a pyridonecarboxylic acid compd. or
     its salt can be elevated at around the physiol. pH value thereof, which
     makes it possible to prep. aq. soln. prepns. to be used mainly as eye
     drops, nasal drops, ear drops, etc. An ear drop soln. (pH 7.0) contained
```

lomefloxacin.cntdot.HCl 0.3, dipotassium glycyrrhizinate 0.1, boric acid

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD

1.6 q, NaOH q.s., HCl q.s, and distd. water q.s. to 100 mL.

ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L5 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN AN 1998:527058 CAPLUS
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.DN 129:153244

TI Method for stabilizing arylcarboxylic acids with heterocyclic bases

IN Sawa, Shirou

PA Senju Pharmaceutical Co., Ltd., Japan

SO Eur. Pat. Appl., 21 pp. CODEN: EPXXDW

DT Patent

LA English

FAN CNT 1

FAN.	CNT	1			
	PA:	TENT NO.	KIND	DATE	APPLICATION NO DATE
ΡI	EP	856310	A2	19980805	EP 1998-101804 19980203
	EΡ	856310	A3	20000119	
	EP	856310	В1	20031112	
		R: AT, B	E, CH, DI	E, DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
		IE, S	, LT, L	J, FI, RO	
					JP 1997-21805 A 19970204
	US	6274592	B1	20010814	US 1998-17626 19980202
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	CA	2228536	AA	19980804	CA 1998-2228536 19980203
					JP 1997-21805 A 19970204
	JР	10279503	<b>A</b> 2	19981020	JP 1998-22363 19980203
					JP 1997-21805 A 19970204
	AT	253891	E	20031115	AT 1998-101804 19980203
					JP 1997-21805 A 19970204
	US	2001056098	A1	20011227	US 2001-885096 20010621
					JP 1997-21805 A 19970204
					US 1998-17626 A319980202

- AB An antiinflammatory arylcarboxylic acid, e.g. pranoprofen, is stabilized in aq. soln. at all temps. by adding a heterocyclic base [I; A, A', X = C, N; Y, Z = C, or YZ = CH; R2-R8 = H, halo, CO2H, (substituted) alkyl, (substituted) cycloalkyl, (substituted) acyl, (substituted) aryl, (substituted) heterocycle; R4R5 and R6R7 may complete heterocyclic rings]. Such aq. solns. can be used as eye drops, nasal drops, ear drops, etc. Thus, an aq. soln. contg. pranoprofen 0.5 and H3BO3 1.6 wt.% was stabilized during storage at 4, 60, and 80.degree. for 1-4 wk by addn. of 0.3 wt.% caffeine.
- L5 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN AN 1996:748455 CAPLUS

DN 126:31277

TI Quinoline derivatives useful as endothelin receptor antagonists, process for their preparation, the resultant intermediates, their use as medicaments, and pharmaceutical compositions containing them

IN Hawsslein, Jean-Luc

PA Roussel-UCLAF, Fr.; Haesslein, Jean-Luc

SO PCT Int. Appl., 72 pp. CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE. PΙ WO 9633190 19961024 WO 1996-FR591 A1 19960418 W: JP, US RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE 19950420 FR 1995-4722 FR 2733233 19961025 A1 FR 1995-4722 19950420 FR 2733233 19970530 В1

OS MARPAT 126:31277

GI

AB The invention concerns compds. I and their isomers and addn. salts [wherein A = H or CH2B; B = alkyl, C6H3R1R2R3, (un) substituted 3-pyridyl, cyclohexyl, or 2-furyl; Z1, Z2 = H, or together form fused carbo- or heterocyclic (O, S, N, NH) ring; Z = O or S; X = CO2H or derivs.,

Patel

GI

tetrazolyl, CONHSO2R6; R6 = (un)substituted alkyl, alkenyl or Ph; R = H, halo, OH, SH, CO2H, alkyl, phenylthioalkyl, alkoxy, Ph, naphthyl, PhCH2, PhCH2CH2, various heterocycles, and PhS, most of which may be substituted; R1-R5 = H, halo, OH, alkyl, alkoxy, cyano, NO2, etc.; or R2R3 may likewise form the rings formed by Z1 and Z2, with the proviso that when A = H, then Z1Z2 form ring]. I are endothelin receptor antagonists, useful for treatment of vascular spasms, renal insufficiency, atherosclerosis, hypertension, asthma, osteoporosis, etc. For example, the intermediate II (prepn. given) underwent a sequence of condensation with aniline, thermal cyclization to a dihydroquinolone, N-alkylation with piperonyl bromide, and hydrolysis with aq. ethanolic KOH, to give title potassium salt III. In tests for inhibition of endothelin receptors A and B in vitro, III had IC50 values of 10.6 nM and 606 nM, resp.

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=> s chromene and5HT
            0 CHROMENE AND5HT
=> s chromene and 5HT
             5 CHROMENE AND 5HT
=> d 17 fbib hitstr abs total
L7
     ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
     2003:356424 CAPLUS
AN
DN
     138:368765
ΤI
     Preparation of 4-oxo-4H-chromene-2-carboxamides and
     4-oxo-1,4-dihydroquinoline-2-carboxamides as 5-HT antagonists for
     treatment of psychiatric disorders
IN
     Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler,
     Carey; McCauley, John; Pierson, Edward; Sohn, Daniel
PA
     Astrazeneca AB, Swed.
     PCT Int. Appl., 160 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO.
                                                           DATE
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     WO 2003037872
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             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
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            NE, SN, TD, TG
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os
    MARPAT 138:368765
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$$R^{1}$$
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 $R^{6}$ 
 $Y-R^{7}$ 
 $R^{2}$ 
 $R^{2}$ 

AB Quinolines I [wherein Rl = independently H, halo, OH, CN, MeO, MeS, NHA, NA2, NHCOA, CONH2, CONHA, CONA2, OA, aryl, or (un)substituted (cyclo)alkyl; R2 = NR3(CH2)nN(R3)2, QN(R3)2, NR3QR3, or (un)substituted piperazinyl, homopiperazinyl, or 1,4-diazacyclooctyl; R3 = H, AOH, or (un) substituted (cyclo) alkyl, alkenyl, or alkynyl; R4 = H or (un) substituted alkyl; R5 = O, OR4, N(R4)2 or SR4; R6 = H or Me; R7 = (un) substituted aryl or heterocyclyl; R8 = CH2, CO, SO2, SO2NH, CONH, O, S, SO, or heterocyclyl connected to R7 by a ring fusion or single bond; A = (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; Q = heterocyclyl; Y = CONH, CONA, NHCO, CSNH, CH2NH, COCH2, CH2CO, CO-piperazinediyl, COR8, NACO, CSNA, CH2NA, NACH2, or 5-membered heterocyclyl] are disclosed as 5-HT1B and 5-HT1D antagonists. Related 4-oxo-4H-chromene -2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides were prepd. and tested for biol. activity. For example, reaction of di-Et acetylenedicarboxylate with 2-bromophenol in the presence of a catalytic amt. of tetrabutylammonium fluoride afforded 2-(2-bromophenoxy)but-2enedioic acid di-Et ester (91%), which was sapond. with NaOH to give the diacid (88%). Cyclization using H2SO4 in EtOH provided Et 8-bromo-4-oxo-4H-chromene-2-carboxylate (24%). Pd-catalyzed substitution with N-methylpiperazine (70%), conversion to the HCl salt of the acid (100%), and amidation with 4-(4-morpholinyl)aniline in the presence of HOBt and TBTU in DMF and TEA gave II. All example compds. showed affinity for 5-HTlB and 5-HTlD receptors with Ki values of < 10.mu.M. II was among twelve example compds. which reversed 5-HT1B agonist-induced hypothermia in guinea pigs in a dosage range of 0.006 mg/kg - 5.5 mg/kg. In addn., four chromenones demonstrated activity in a learned helplessness assay for antidepressant/antianxiety activity. useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 3 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
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ΑN 2003:356423 CAPLUS

DN 138:368764

ΤI Preparation of 4-oxo-4H-chromene-2-carboxamides and 4-oxo-1,4-dihydroquinoline-2-carboxamides as 5-HT antagonists for treatment of psychiatric disorders

Chapdelaine, Marc; Davenport, Timothy; Haeberlein, Markus; Horchler, Carey; Pierson, Edward; Sohn, Daniel; McCauley, John Astrazeneca AB, Swed. IN

PA

PCT Int. Appl., 137 pp. CODEN: PIXXD2

DTPatent

LA English

FAN.CNT 1

PAT	CENT 1	NO.		KI	ND	DATE			A	PPLI	CATI	ои ис	э.	DATE			
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		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
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BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,

SE 2001-3648 A 20011101

OS MARPAT 138:368764

GI

$$R^{1}$$
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 $R^{6}$ 
 $R^{6}$ 
 $R^{7}$ 
 $R^{7}$ 
 $R^{7}$ 
 $R^{7}$ 
 $R^{7}$ 
 $R^{7}$ 

Title quinolinones I [wherein R1 = H, halo, OH, CN, MeO, MeS, NHA, NA2, AB NHCOA, CONH2, CONHA, CONA2, OA, aryl, or (un) substituted (cyclo) alkyl; R2 = NR3(CH2)nN(R3)2, QN(R3)2, NR3QR3, or (un)substituted piperazinyl, homopiperazinyl, or 1,4-diazacyclooctyl; R3 = H, AOH, or (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; R4 = H or (un)substituted alkyl; R5 = O, NR4, or S; R6 = H or Me; R7 = (un)substituted aryl or heterocyclyl; R8 = CH2, CO, SO2, SO2NH, CONH, O, S, SO, or heterocyclyl connected to R7 by a ring fusion or single bond; A = (un)substituted (cyclo)alkyl, alkenyl, or alkynyl; Q = heterocyclyl; Y = CONH, CONA, NHCO, CSNH, CH2NH, COCH2, CH2CO, CO-piperazinediyl, COR8, NACO, CSNA, CH2NA, NACH2, or 5-membered heterocyclyl] and related chromenones were prepd. as 5-HT1B and 5-HT1D antagonists. For example, reaction of di-Et acetylenedicarboxylate with 2-bromophenol in the presence of a catalytic amt. of tetrabutylammonium fluoride afforded 2-(2-bromophenoxy)but-2-enedioic acid di-Et ester (91%), which was sapond. with NaOH to give the diacid (88%). Cyclization using H2SO4 in EtOH provided Et 8-bromo-4-oxo-4H-chromene -2-carboxylate (24%). Pd-catalyzed substitution with N-methylpiperazine (70%), conversion to the HCl salt of the acid (100%), and amidation with 4-(4-morpholinyl)aniline in the presence of HOBt and TBTU in DMF and TEA gave II. All example compds. showed affinity for 5-HT1B and 5-HT1D receptors with Ki values of < 10 .mu.M. II was among twelve example compds. which reversed 5-HT1B agonist-induced hypothermia in guinea pigs in a dosage range of 0.006 mg/kg - 5.5 mg/kg. In addn., four chromenones demonstrated activity in a learned helplessness assay for antidepressant/antianxiety activity. Thus, I are useful for the treatment of psychiatric disorders including but not limited to depression, generalized anxiety, eating disorders, dementia, panic disorder, and sleep disorders (no data). The compds. may also be useful in the treatment of gastrointestinal disorders, motor disorders, endocrine disorders, vasospasm, and sexual dysfunction (no data).

II

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
L7
AN
     2001:693264 CAPLUS
     135:257269
DN
     Preparation of N-heterocyclyl amide compounds as 5-HT antagonists
ΤI
     Yamada, Akira; Tomishima, Masaki; Hayashida, Hisashi; Imanishi, Masashi;
IN
     Spears, Glen W.; Ito, Kiyotaka; Takahashi, Fumie; Miyake, Hiroshi
PA
     Fujisawa Pharmaceutical Co., Ltd., Japan
SO
     PCT Int. Appl., 239 pp.
     CODEN: PIXXD2
DT
     Patent
     Japanese __
LA
FAN.CNT 1
                     KIND DATE
     PATENT NO.
                                          APPLICATION NO. DATE
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                     A1 20010920
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     AU 2001041128
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                                          JP 2000-305947 A 20001005
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     EP 1264820
                      A1
                           20021211
                                          EP 2001-912338
                                                           20010313
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                                          JP 2000-70127 A 20000314
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                                          WO 2001-JP1993 W 20010313
     CASREACT 135:257269; MARPAT 135:257269
os
AB
     Amides compds. represented by the general formula R1-A-X-NHCO-Y-R2
     [wherein R1 is an optionally substituted heterocyclic group or optionally
     substituted phenyl; R2 is optionally substituted fused Ph, optionally
     substituted Ph, or optionally substituted thienyl; A is a group
     represented by the formula -(CH2)t-(O)m- or -(CR3R4)pNR5(CO)n- (wherein R3
     and R4 each is hydrogen or R3 and R4 in combination form imino; R5 is
     hydrogen or lower alkyl; t is 0, 1, or 2; and p, m, and n each is 0 or 1);
     X is optionally substituted phenylene or an optionally substituted,
     divalent, nitrogenous heterocyclic group; and Y is a bond, lower alkylene,
     or lower alkenylene] and salts thereof are prepd. Theses amides include
     phenylacetamide, cinnamides, 1H-indole-7-carboxamides,
     3-(2-pyridyl)-2-propenamides, 5-phenyl-2-thiophenecarboxamides,
     9H-carbazolecarboxamides, 3-phenyl-2-propenamides, 9H-fluorene-1-
     carboxamides, 2,3-dihydrobenz[b]oxepine-4-carboxamides,
     1H-benzo[b]thiepin-4-carboxamides, and 3-(1H-indol-3-yl)-2-propenamides.
     They are antagonists of 5-hydroxytryptamine (5-HT), in particular 5-HT2c,
     and are useful for the treatment of 5-HT-mediated diseases such as (1)
     central nervous system disorders in including anxiety, depression,
     obsessive-compulsive neurosis, migraine headache, anorexia, Alzheimer's
    disease, sleep disorder, over-eating, and panic, (2) withdrawal symptom
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